

WHAT IS CLAIMED IS:

1. A process for laminating a flexible electrically addressable display, the process comprising:

providing a flexible, electrically addressable liquid crystal display having first and second surfaces;

placing a protective sheet over at least one of the first and second surfaces; and

subjecting the protective sheet to conditions of temperature and pressure effective to cause the protective sheet to adhere to the surface, thereby forming a laminate for the electrically addressable liquid crystal display.

2. The process of claim 1 further comprising:

providing an adhesive resin between the protective sheet and the surface prior to the applying heat and pressure.

3. The process of claim 1 wherein the flexible, electrically addressable liquid crystal display comprises:

a flexible substrate;

a transparent, first electrically conductive layer disposed on the substrate;

a light modulating layer comprising liquid crystalline material and a polymeric binder disposed on the electrically conductive layer;

a patterned layer comprising areas of opaque electrically conductive material disposed on the light modulating layer;

a dielectric layer disposed on the patterned layer, the dielectric layer comprising contact apertures to the areas of opaque electrically conductive material and to the first electrically conductive layer; and

a second electrically conductive layer overlying the dielectric layer and extending into the contact apertures to the areas of opaque electrically conductive material and to the first electrically conductive layer.

4. The process of claim 3 wherein the substrate comprises polyester and the first electrically conductive layer comprises indium-tin oxide (ITO).

09627802.072800

5. The process of claim 3 wherein the liquid crystalline material comprises cholesteric material and the polymeric binder comprises deionized gelatin.

6. The process of claim 3 wherein the areas of opaque electrically conductive material comprise electrically conductive ink.

7. The process of claim 1 wherein the protective sheet is formed of a material selected from a group consisting of polyesters, polyolefins, polycarbonates, vinyl resins, acrylic resins, and methacrylic resins.

8. The process of claim 2 wherein the adhesive resin is selected from the group consisting of homopolymer and co-polymer adhesive resins.

9. The process of claim 1 wherein the applying heat is at a temperature of about 25°C to about 150°C and the applying pressure is at a pressure of about 1 kg/cm² to about 5 kg/cm².

10. The process of claim 1 further comprising:
inserting a first printed sheet between the first surface and a first protective sheet.

11. The process of claim 10 further comprising:
inserting a second printed sheet between the second surface and a second protective sheet.

12. The process of claim 1 wherein at least one protective sheet comprises a contact aperture to the electrically addressable liquid crystal display.

13. A laminated electrically addressable liquid crystal display formed by the process of claim 1.

14. A process for laminating a flexible electrically addressable display, the process comprising:

providing a flexible, electrically addressable liquid crystal display having first and second surfaces and comprising:

a transparent, first electrically conductive layer disposed on the substrate;

00627802.072800

a light modulating layer comprising liquid crystalline material and a polymeric binder disposed on the electrically conductive layer;

a patterned layer comprising areas of opaque electrically conductive material disposed on the light modulating layer;

a dielectric layer disposed on the patterned layer, the dielectric layer comprising contact apertures to the areas of opaque electrically conductive material and to the first electrically conductive layer; and

a second electrically conductive layer overlying the dielectric layer and extending into the contact apertures to the areas of opaque electrically conductive material and to the first electrically conductive layer.

placing a protective sheet over each of the first and second surfaces of the electrically addressable liquid crystal display; and

subjecting the protective sheets to conditions of temperature and pressure effective to cause the protective sheets to adhere to the first and second surfaces, thereby forming a laminate for the electrically addressable liquid crystal display.

15. The process of claim 14 wherein the substrate and the protective sheets comprise polyester, the first electrically conductive layer comprises indium-tin oxide (ITO), the liquid crystalline material comprises a cholesteric material, the polymeric binder comprises deionized gelatin, and the areas of opaque electrically conductive material comprise electrically conductive ink.

008270 20872960